UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/503,401	02/14/2000	Ramin Rezaiifar	PA451DIV2	6558

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EXAMINER
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ART UNIT	PAPER NUMBER
2616	

NOTIFICATION DATE	DELIVERY MODE
02/21/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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	Application No.	Applicant(s)
Office Action Summary	09/503,401	REZAIIFAR ET AL.
	Examiner	Art Unit	
	Anh-Vu H. Ly	2616	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 December 2007*.

2a)☐ This action is **FINAL.** 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4,6-10,12-17 and 19-35* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4,6,12-17 and 19-35* is/are rejected.

7)☒ Claim(s) *7-10,13-16,20-23,26,27,30,31,34 and 35* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All b)☐ Some * c)☐ None of:

　　　　1.☐ Certified copies of the priority documents have been received.

　　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on December 19, 2007 has been entered.

Claim Objections

2.   Claims 7-10, 13-16, 20-23, 26-27, 30-31, and 34-35 are objected to because of the

following informalities:

With respect to claims 7, 13, and 20, in line 2, "said forward link scheduling information"

lacks antecedent basis.

With respect to claims 8, 14, and 21, in line 2, "said reverse link scheduling information"

lacks antecedent basis.

With respect to claims 9, 15, and 22, in line 2, "said active set information" lacks

antecedent basis.

With respect to claims 10, 16, and 23, in line 2, "said erasure-indicator-bit information"

lacks antecedent basis.

With respect to claim 26, in line 14, "said channel active set information" lacks

antecedent basis.

With respect to claim 27, in line 14, "said erasure-indicator-bit information" lacks

antecedent basis.

With respect to claims 30 and 34, in line 10, "said channel active set information" lacks antecedent basis.

With respect to claims 31 and 35, in line 10, "said erasure-indicator-bit information" lacks antecedent basis.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3.   Claims 4, 12-17, 19-23, and 28-35 are rejected under 35 U.S.C. 112, first paragraph, as being single means claims. A single means claim which covered every conceivable means for achieving the stated purpose was held nonenabling for the scope of the claim because the specification disclosed at most only those means known to the inventor. Further, a single means claim, i.e., where a means recitation does not appear in combination with another recited element of means, is subject to an undue breadth rejection under 35U.S.C. 112, first paragraph. In re Hyatt, 708 F.2d 712, 714-715, 218 USPQ 195, 197(Fed. Cir. 1983).

With respect to claims 4, 17, and 28-35, the claimed apparatus comprising **only a transmitter** for forming and transmitting a message does not appear in combination with another recited element of means. Herein, the transmitter, or a means, does not appear in combination with any other means. Therefore, it is a single means claim.

Other claims are rejected for the reasons as set forth in rejected independent claims 4, 17,

and 28-35.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section
122(b), by another filed in the United States before the invention by the applicant for
patent or (2) a patent granted on an application for patent by another filed in the United
States before the invention by the applicant for patent, except that an international
application filed under the treaty defined in section 351(a) shall have the effects for
purposes of this subsection of an application filed in the United States only if the
international application designated the United States and was published under Article
21(2) of such treaty in the English language.

4.   Claims 1, 4, 6, 12, 17, 19, and 24-35 are rejected under 35 U.S.C. 102(e) as being

anticipated by Dutta (US Patent No. 6,407,986 B1).

With respect to claims 1, 4, and 17, Dutta discloses a method and apparatus (Fig. 1) for

transmitting data comprising the steps of:

transmitting, prior to and independent of said data transmission, a message indicative of

the rate of said data (col. 20, lines 38-42, a code for one of the combinations of forward and

return channel data rates transmitted in the bulletin boards sets the data rate at which a receiving

data terminal 120 will transmit data over the assigned return channel 162 or 163. Herein, the

bulletin boards are transmitted message indicative of the rate of the data) and a time interval over

which said data will be transmitted at said rate (col. 23, lines 33-47, Table 1, slots per frame and

frame period is the time interval); and

transmitting said data at said rate during said time interval using a data transmission

channel (col. 10, lines 48-53, based on received network management instructions, such as data

transfer rates, return channel frequencies and assigned time slots, the control processor 127 of the

mobile terminal 120 compiles user messages for transmission at a designated one of a number of

available data rates over the designated return channel 162 or 163. Herein, the time slots are

time interval and return channel 162 or 163 is the one data transmission channel);

wherein said message (Fig. 9) comprises:

an indication of the frame type (Fig. 9, bulletin board 350, network management control

message type);

an indication of said rate of said data (Fig. 9,. DR 358); and

an indication of said time interval (Fig. 9, time slots 367 ... 389);

wherein said frame type (Fig. 9, bulletin board 350) indicates **at least one** of link

schedule (Fig. 9, frequencies fields 362 and 367 through 369 and Calendar Date 365), channel

active set (Fig. 9, time slots 367 ... 389) and erasure-indicator-bit;

wherein said link schedule indicates the duration of said data transmission (Fig. 9,

Calendar Date 365);

wherein said channel active set indicates a set of base stations; and

wherein said erasure-indicator-bit indicates an erasure of previously received frames.

With respect to claims 6, 12, and 19, Dutta discloses that wherein said link schedule is

selected from a group consisting of a forward link schedule and a reverse link schedule (Fig. 9,

forward link frequencies 362 and return link frequencies 367...369).

With respect to claims 24, 28, and 32, Dutta discloses a method and apparatus (Fig. 1) for

transmitting data comprising the steps of:

transmitting, prior to and independent of said data transmission, a message indicative of

the rate of said data (col. 20, lines 38-42, a code for one of the combinations of forward and

return channel data rates transmitted in the bulletin boards sets the data rate at which a receiving

data terminal 120 will transmit data over the assigned return channel 162 or 163. Herein, the

bulletin boards are transmitted message indicative of the rate of the data) and a time interval over

which said data will be transmitted at said rate (col. 23, lines 33-47, Table 1, slots per frame and

frame period is the time interval); and

transmitting said data at said rate during said time interval using a data transmission

channel (col. 10, lines 48-53, based on received network management instructions, such as data

transfer rates, return channel frequencies and assigned time slots, the control processor 127 of the

mobile terminal 120 compiles user messages for transmission at a designated one of a number of

available data rates over the designated return channel 162 or 163. Herein, the time slots are

time interval and return channel 162 or 163 is the one data transmission channel);

wherein said message (Fig. 9) comprises:

an indication of the frame type (Fig. 9, bulletin board 350, network management control

message type);

an indication of said rate of said data (Fig. 9,. DR 358); and

an indication of said time interval (Fig. 9, time slots 367 ... 389);

wherein said frame type (Fig. 9, bulletin board 350) indicates **at least one** of link

schedule, channel active set (Fig. 9, time slots 367 ... 389) and erasure-indicator-bit; and,

wherein said link schedule is a forward link scheduling information contained in a 10 bit

forward link schedule message comprising:

2 bits indicating that a frame is a forward link schedule message;

4 bits indicating an assigned forward link rate of said data channel; and

4 bits indicating the duration for which said data channel is assigned said forward

link rate.

With respect to claims 25, 29, and 33, Dutta discloses a method and apparatus (Fig. 1) for

transmitting data comprising the steps of:

transmitting, prior to and independent of said data transmission, a message indicative of

the rate of said data (col. 20, lines 38-42, a code for one of the combinations of forward and

return channel data rates transmitted in the bulletin boards sets the data rate at which a receiving

data terminal 120 will transmit data over the assigned return channel 162 or 163. Herein, the

bulletin boards are transmitted message indicative of the rate of the data) and a time interval over

which said data will be transmitted at said rate (col. 23, lines 33-47, Table 1, slots per frame and

frame period is the time interval); and

transmitting said data at said rate during said time interval using a data transmission

channel (col. 10, lines 48-53, based on received network management instructions, such as data

transfer rates, return channel frequencies and assigned time slots, the control processor 127 of the

mobile terminal 120 compiles user messages for transmission at a designated one of a number of

available data rates over the designated return channel 162 or 163. Herein, the time slots are

time interval and return channel 162 or 163 is the one data transmission channel);

wherein said message (Fig. 9) comprises:

an indication of the frame type (Fig. 9, bulletin board 350, network management control

message type);

an indication of said rate of said data (Fig. 9,. DR 358); and

an indication of said time interval (Fig. 9, time slots 367 ... 389);

wherein said frame type (Fig. 9, bulletin board 350) indicates **at least one** of link

schedule, channel active set (Fig. 9, time slots 367 ... 389) and erasure-indicator-bit; and,

wherein said link schedule is a reverse link scheduling information contained in a 18 bit

reverse link schedule message comprising:

2 bits indicating that a frame is a reverse link schedule message;

4 bits indicating a granted reverse link rate of said data channel; and

12 bits indicating the duration for which said data channel is granted said reverse

link rate, wherein each subset of 4 bits represents a single carrier.

With respect to claims 26, 30, and 34, Dutta discloses a method and apparatus (Fig. 1) for

transmitting data comprising the steps of:

transmitting, prior to and independent of said data transmission, a message indicative of

the rate of said data (col. 20, lines 38-42, a code for one of the combinations of forward and

return channel data rates transmitted in the bulletin boards sets the data rate at which a receiving

data terminal 120 will transmit data over the assigned return channel 162 or 163. Herein, the

bulletin boards are transmitted message indicative of the rate of the data) and a time interval over

which said data will be transmitted at said rate (col. 23, lines 33-47, Table 1, slots per frame and frame period is the time interval); and

transmitting said data at said rate during said time interval using a data transmission channel (col. 10, lines 48-53, based on received network management instructions, such as data transfer rates, return channel frequencies and assigned time slots, the control processor 127 of the mobile terminal 120 compiles user messages for transmission at a designated one of a number of available data rates over the designated return channel 162 or 163. Herein, the time slots are time interval and return channel 162 or 163 is the one data transmission channel);

wherein said message (Fig. 9) comprises:

an indication of the frame type (Fig. 9, bulletin board 350, network management control message type);

an indication of said rate of said data (Fig. 9,. DR 358); and

an indication of said time interval (Fig. 9, time slots 367 ... 389);

wherein said frame type (Fig. 9, bulletin board 350) indicates **at least one** of link schedule (Fig. 9, frequencies fields 362 and 367 through 369 and Calendar Date 365), channel active set, and erasure-indicator-bit; and,

wherein said channel active set information is contained in an 8 bit channel active set message comprising:

2 bits indicating that a frame is a channel active set message; and,

6 bits indicating base stations in the active set, wherein each bit represents a base station.

With respect to claims 27, 31, and 35, Dutta discloses a method and apparatus (Fig. 1) for

transmitting data comprising the steps of:

transmitting, prior to and independent of said data transmission, a message indicative of

the rate of said data (col. 20, lines 38-42, a code for one of the combinations of forward and

return channel data rates transmitted in the bulletin boards sets the data rate at which a receiving

data terminal 120 will transmit data over the assigned return channel 162 or 163. Herein, the

bulletin boards are transmitted message indicative of the rate of the data) and a time interval over

which said data will be transmitted at said rate (col. 23, lines 33-47, Table 1, slots per frame and

frame period is the time interval); and

transmitting said data at said rate during said time interval using a data transmission

channel (col. 10, lines 48-53, based on received network management instructions, such as data

transfer rates, return channel frequencies and assigned time slots, the control processor 127 of the

mobile terminal 120 compiles user messages for transmission at a designated one of a number of

available data rates over the designated return channel 162 or 163. Herein, the time slots are

time interval and return channel 162 or 163 is the one data transmission channel);

wherein said message (Fig. 9) comprises:

an indication of the frame type (Fig. 9, bulletin board 350, network management control

message type);

an indication of said rate of said data (Fig. 9,. DR 358); and

an indication of said time interval (Fig. 9, time slots 367 ... 389);

wherein said frame type (Fig. 9, bulletin board 350) indicates **at least one** of link

schedule (Fig. 9, frequencies fields 362 and 367 through 369 and Calendar Date 365), channel

active set, and erasure-indicator-bit; and,

wherein said erasure-indicator-bit information is contained in an 5 bit erasure-indicator-

bit message comprising:

        2 bits indicating that a frame is an erasure-indicator-bit message;

        1 bit indicating an erasure-indicator-bit for a fundamental data channel;

        1 bit indicating an erasure-indicator-bit for a supplemental data channel; and,

        1 bit indicating demodulation of said fundamental channel.

Allowable Subject Matter

5.   Claims 7-10, 13-16, and 20-23 are objected to as being dependent upon a rejected base

claim, but would be allowable if rewritten in independent form including all of the limitations of

the base claim and any intervening claims.

Response to Arguments

6.   Applicant's arguments with respect to claims 1, 4, 6-10, 11-17, and 19-35 have been

considered but are moot in view of the new ground(s) of rejection.

Examiner would like to take this opportunity to point out and clarify some of the issues

presented in the Amendment as filed on December 19, 2007.

First of all, regarding claim 1, in lines 12-13, "wherein said frame type indicates **at least**

one of a link schedule, channel active set, and erasure-indicator-bit". Since "**at least one**" is

used in the claim therefore, either, the link schedule, channel active set **or** erasure indicator bit

can be considered by Examiner. In this particular example, if the Examiner considers "the link

schedule" then the limitation recited in lines 14-15 "wherein said link scheduler indicates the

duration of said data transmission" must be considered by Examiner.

However, regarding claim 24, in lines 12-13, "wherein said frame type indicates **at least**

one of a link schedule, channel active set, and erasure-indicator-bit". Herein, again, "at least

one" is used in the claim. For this particular application, if the Examiner chooses "channel active

set" as the limitation to be considered then limitations recited in lines 14-22 such as "wherein

said link schedule is a forward link scheduling information contained in a 10 bit forward link

schedule message comprising:

        2 bits indicating that a frame is a forward link schedule message;

        4 bits indicating an assigned forward link rate of said data channel; and

        4 bits indicating the duration for which said data channel is assigned said forward

link rate" will be ignored by the Examiner since it is not related to the considered "channel active

set".

        Therefore, Examiner suggests that, in all independent claims, deleting "at least one".

Conclusion

7.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Anh-Vu H. Ly whose telephone number is 571-272-3175. The

examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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